REMARKS

Upon entry of this amendment, claims 16, and 21-24 are pending in the instant application. Claims 1-15, and 18-20 were canceled as being drawn to a non-elected invention, and new claims 25-30 were added. The present amendments are fully supported by the specification. No new matter has been added.

1. Information Disclosure Statement

With respect to the Information Disclosure Statement (IDS) filed on May 3, 2002, Applicants note that all of the references cited in the IPER, corresponding to US01/05019, (reference CN) were disclosed individually in an IDS filed on July 23, 2001. Specifically, in the IDS filed on July 23, 2001, Hotamisligil et al. was cited as reference CF; Scheja et al. was cited as reference CJ; Kane et al. was cited as reference CG and Hertzel et al. was cited as reference CE.

2. Priority

The Examiner has objected to the instant specification for failing to contain a specific reference to the prior applications in the first sentence of the specification, as required by 37 C.F.R. § 1.78. Applicants have herewith amended the specification to place it in compliance with 37 C.F.R. § 1.78.

3. Specification

The Examiner has objected to the title of the invention as not being descriptive. Applicants have herewith amended the title as suggested by the Examiner.

4. Claim Rejections -- 35 U.S.C. § 112

Claims 16 and 21-24 were rejected for overbreadth. On page 5 of Paper No. 11, the Examiner states:

> The claims as written read on a broad scope of Mal1 transcripts or polypeptides from any organism. The specification as filed teaches the sequence of human and mouse Mal1 on pages 2 and 3. This disclosure does not provide a representative number of species of Mal1 from any organism as broadly claimed so that one of skill in the art would have recognized that Applicants was in possession of the breath of methods claimed for detection of any such Mal1.

The claims have been amended to require diagnosing a risk of developing insulin resistance by determining the level of human or mouse Mal1 transcripts or polypeptide in a tissue sample. Applicants therefore request withdrawal of this rejection.

CONCLUSION

On the basis of the foregoing amendments, Applicants respectfully submit that the pending claims are in condition for allowance. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

Dated: October 8, 2002

Ingrid A. Beattie, Reg. No. 42,306
Attorney for Applicants
c/o MINTZ, LEVIN, COHN, FERRIS,
GLOVSKY & POPEO, P.C.
One Financial Center
Boston, Massachusetts 02111
Tel: (617) 542-6000
Fax: (617) 542-2241

Version with Markings to Show Changes

In the Specification:

--A METHOD OF DIAGNOSING A RISK OF DEVELOPING INSULIN RESISTANCE--

--RELATED APPLICATIONS

This application claims priority to provisional application U.S.S.N. 60/183,106, filed February 17, 2000.--

In the Claims:

16. (amended) A method of diagnosing a risk of developing insulin resistance [in a mammal,] comprising determining the level of human or mouse Mal1 transcripts or polypeptide in a tissue sample, wherein an increase in the level of said transcripts or said polypeptide in said tissue compared to a normal control tissue indicates that said human or mouse [mammal] is at risk of developing insulin resistance.

25. (new) The method of claim 16, wherein said method comprises determining the level of a human Mal1 transcript.

26. (new) The method of claim 16, wherein said method comprises determining the level of a human Mal1 polypeptide.

27. (new) The method of claim 25, wherein said human Mal1 transcript comprises nucleotides 49-456 of SEQ ID NO: 4.

28. (new) The method of claim 26, wherein said human Mal1 polypeptide comprises SEQ ID NO:3.

29. (new) The method of claim 16, wherein said method comprises determining the level of a mouse Mal1 transcript.

30. (new) The method of claim 16, wherein said method comprises determining the level of a mouse Mal1 polypeptide.